1. (Previously Presented) A method of allocating communication channels in a communication system comprising a plurality of base stations each for communicating with at least one mobile station, the base stations capable of communicating via any of a predetermined group of channels, and some of the base stations being susceptible of being interfered with by other of the base stations in some of the channels of said group of channels, the method comprising the steps of:

predetermining, for each base station, a classification for each channel according to the probability of interference at the channel with other base stations of the plurality of base stations; and

allocating on request a channel according to the predetermined classification and a desired quality class of transmission.

2. (Original) The method of claim 1, wherein each said channel is a time slot.

3. (Original) The method of claim 1, wherein said predetermination comprises:

assigning as owned by said each base station and as avoided by said other base stations a channel in which said other base stations interfere with said each base station;

assigning as owned by said other base stations and as avoided by said each base station remaining channels in which said other base stations interfere with said each base station; and

assigning as shared by said each base station and said other base station channels in which said other base stations interfere with said each base station if used simultaneously with said each base station and which are not assigned as owned by either.

4. (Original) The method of claim 1, wherein:

the communication system further includes a controller connected to each base station;

said predetermination for each base station is reported to the controller; and

said allocating is performed in the controller.

5. (Original) The method of claim 3, wherein:

the communication system further includes a controller connected to each base station;

said predetermination for each base station is reported to the controller;

said allocating is performed in the controller; and

the controller maintains an indication of which channels are currently allocated for each base station.

6. (Original) The method of claim 5, wherein:

if neither an owned channel nor a shared channel of a first base station is available for a requested communication, the controller determines whether any avoided channel of the first base station is not in use by a second base station owning that channel, and if so, that channel is allocated for the requested communication.

7. (Original) The method of claim 2 wherein the step of allocating is further according to location of a mobile station to be communicated with.

8. (Previously Presented) Apparatus for allocating communication channels in a communication system comprising a plurality of base stations each for communicating with at least one mobile station, the base stations capable of communicating via any of a predetermined group of channels, and some of the base stations being susceptible of being interfered with by other of the base stations in some of the channels of said group of channels, the apparatus comprising a logic unit configured to:

predetermine, for each base station, a classification for each channel according to the probability of interference at the channel with other base stations of the plurality of bases stations; and

allocate on request a channel according to the predetermined classification and a desired quality class of transmission.

9. (Original) The apparatus of claim 8, wherein each said channel is a time slot.

10. (Original) The apparatus of claim 8, wherein said logic unit is configured to perform said predetermination by:

assigning as owned by said each base station and as avoided by said other base stations a channel in which said other base stations interfere with said each base station;

assigning as owned by said other base stations and as avoided by said each base station remaining channels in which said other base stations interfere with said each base station; and

assigning as shared by said each base station and said other base station channels in which said other base stations interfere with said each base station if used simultaneously with said each base station and which are not assigned as owned by either.

11. (Original) The apparatus of claim 8, further comprising a controller connected to each base station and configured to:

receive said predetermination for each base station is reported to the controller; and

to be a portion of said logic unit for performing said allocating.

12. (Original) The apparatus of claim 11, wherein the controller maintains an indication of which channels are currently allocated for each base station.

13. (Original) The apparatus of claim 12, wherein:

if neither an owned channel nor a shared channel of a first base station is available for a requested communication, the controller is configured to determine whether any avoided channel of the first base station is not in use by a second base station owning that channel, and if so, to allocate that channel for the requested communication.

14. (Original) The apparatus of claim 9, wherein the logic unit is configured to allocate a channel further according to location of a mobile station to be communicated with.

15. (New) Apparatus for allocating communication channels in a communication system comprising a plurality of base stations each for communicating with at least one mobile station, the base stations capable of communicating via any of a predetermined group of channels, and some of the base stations being susceptible of being interfered with by other of the base stations in some of the channels of said group of channels, the apparatus comprising a logic means configured to:

predetermine, for each base station, a classification for each channel according to the probability of interference at the channel with other base stations of the plurality of bases stations; and

allocate on request a channel according to the predetermined classification and a desired quality class of transmission.